

## **AMENDMENTS TO THE SPECIFICATION**

***Please add the following paragraph to page 1 after the Title of the Invention:***

This is a Divisional Application of U.S. Application Serial No. 09/959,146, filed October 18, 2001, which is the National Stage of International Application No. PCT/JP00/02617, filed April 21, 1999.

***Please amend the paragraph beginning on line 20 of page 2 as follows:***

The connection and shut-off of the power source are generally carried out in an order shown in flow charts of Fig. 9. The power source 50 is connected when the electronic component mounting apparatus 50 is in use, and disconnected when the electronic component mounting apparatus 50 is finished to be used at termination of a sequence of production operations or on the occasion of maintenance. In some of the electronic component mounting apparatuses, all or part of the component feed devices are adapted to supplement components during the production with an aim for a long-time production, and in this case the power source is disconnected to the drive device for the component feed device to which the components are supplemented. This is generally intended to secure safety of workers handling the electronic component mounting apparatus.

***Please amend the paragraph beginning on line 11 of page 3 as follows:***

Meanwhile, saving resources and energy has become an issue to be tackled in each of industrial fields from a viewpoint of protecting the ~~earth~~ earth's environment. Thus, in the electronic component mounting apparatus, cut back of ~~a consumption power at the whole of power consumption of entire~~ facilities or per unit production amount is grappled. On the other hand, an improvement in production capacity per unit time is demanded to the electronic component mounting apparatus, which leads to an increase of a current consumed at each of drive ~~devices~~ device. In general, while an operation speed of each drive device is unavoidably raised so as to increase the production capacity per unit time, this requires to make a construction including the drive device light in weight and increase a capacity of an electric motor or the like used in the drive

device. The power consumption increases in accordance with the increase in capacity of the electric motor, etc., so, the aim of improving the production capacity and saving energy ~~is contradictory to~~ contradict each other.

***Please amend the paragraph beginning on line 1 of page 7 as follows:***

In the electronic component mounting apparatus according to the first aspect of the present invention and in the method for controlling the power supply according to the second aspect of the present invention, the control device is arranged in the electronic component mounting apparatus and detects the drive device which stops operating because of some other reason than the shutoff of the power supply to the electronic component mounting apparatus. ~~And then~~ The, the control device shuts off the power supply for driving the drive device while maintaining the power supply for controlling the operation of the drive device to the stopping drive device of the electronic component mounting apparatus. Since the drive power source is shut off to the stopping drive device, the wasteful power consumption is eliminated and the production is continued with the necessary minimum amount of power.

***Please amend the paragraph beginning on line 19 of page 7 as follows:***

These and other aspects and features of the present invention will become clear from the following description taken in conjunction with the preferred embodiments thereof with reference to the accompanying drawings, in which:

Fig. 1 is a schematic diagram showing a control system in which a control device set to an electronic component mounting apparatus according to an embodiment of the present invention connects, shuts off a power source to each drive device;

Fig. 2 is a diagram schematically showing the constitution of the electronic component mounting apparatus of the embodiment including the control system of Fig. 1;

Fig. 3 is a flow chart ~~explanatory for~~ explaining the operation in a power supply control method executed by the electronic component mounting apparatus of Fig. 2;

Fig. 4 is a conceptional graph indicating a change in ~~consumption power~~ power consumption amount of the electronic component mounting apparatus of Fig. 2 and a conventional electronic component mounting apparatus;

Fig. 5 is a diagram showing the structure of a component feed drive device shown in Fig. 1;

Fig. 6 is a perspective view showing the structure of a circuit board positioning drive device of Fig. 1;

Fig. 7 is a schematic diagram of the constitution of a conventional electronic component mounting apparatus;

Fig. 8 is a schematic diagram of a control system in the conventional electronic component mounting apparatus of Fig. 7; and

Fig. 9 is flow ~~charts explanatory for~~ chart explaining the operation at the connection, shutoff times of a power source in the conventional electronic component mounting apparatus of Fig. 7.

***Please amend the paragraph beginning on line 4 of page 12 as follows:***

As indicated in Fig. 6, the circuit board positioning drive device 109 has a ball screw 1094 extending in the X direction; a motor 1095 as a driving part for rotating the ball screw 1094 in a direction about an axis of the ball screw 1094; an encoder 1093X as an example of a circuit board positioning device operation state detection device for detecting a revolution number of an output shaft of the motor 1095 and sending the revolution number as a movement amount in the X direction; a ball screw 1096 extending in the Y direction; a motor 1097 as a driving part for rotating the ball screw 1096 in a direction about an axis of the ball screw 1096; and an encoder 1093Y as the other example of the circuit board positioning device operation state detection device for detecting a revolution number of an output shaft of the motor 1097 and sending the revolution number as a movement amount in the Y direction. The encoders ~~1093A~~ 1093X, 1093Y are connected to the control device 104.

*Please amend the paragraph beginning on line 18 of page 16 as follows:*

In step 2, the control device 104 judges whether ~~or not~~ the electronic component mounting apparatus 100 is in a maintenance mode such as a check mode or a machine model switch mode or the like. In other words, in the maintenance mode with the power being supplied to the electronic component mounting apparatus 100, when the maintenance work is performed, all of the component feed devices 101A, 101B, the component transfer device 102, and the circuit board positioning device 103 are at rest. Thus, a stop state signal is sent to the control device 104 from the encoders 1073A, 1073B, 1083, 1093 of the apparatuses. Based on the signals from the encoders 1073A, 1073B, 1083, 1093, in step 7, the control device 104 judges which of the drive devices stops. In step 8, the control device 104 outputs a power source shutoff command(s) to the corresponding drive power source device(s) for the drive device(s) judged to be in a halt. That is, since the component feed devices 101A, 101B, the component transfer device 102, and the positioning device 103 are all at rest in the maintenance mode, the control device 104 shuts off the power supply to the corresponding drive power source devices 1071A, 1071B, 1081, and 1091.